IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (*Currently Amended*) A system for carrying and moving an object in a plane, comprising:

(a) an object carrier;

(b) a first and a second linear actuator configured to support said object carrier and move said object carrier in a first direction, said first and second linear actuators extending in parallel along said first direction, said first and second linear actuators being electromagnetic linear actuators comprising:

(i) a magnetic structure, and

(ii) a coil structure,

wherein the coil structure and the magnetic structure are positioned relative to each other and separated by an air bearing that is adapted to support said object carrier;

(c) a third and a fourth linear actuator configured to move said object carrier in a second direction, said third and fourth linear actuators extending in parallel along said second direction[[;]].

~~wherein said first and second linear actuators are adapted to support said object carrier~~.

2. (*Original*) The system of Claim 1, wherein said third and fourth linear actuators are adapted to support said first and second linear actuators.

3. (*Cancelled*).

4. (*Original*) The system of Claim 2, wherein said third and fourth linear actuators each comprise an air bearing to support said first and second linear actuators.

5. (*Currently Amended*) The system of Claim 1, wherein ~~said first and second linear actuators are electromagnetic linear actuators, comprising:~~

~~a~~ said magnetic structure ~~having~~ includes a row of alternating magnetic poles on an outer surface thereof, said row being orientated in said first direction; and

~~a~~ said coil structure ~~having~~ includes an iron core with a number of teeth in a row orientated in said first direction and having a number of coils wound around a respective number of said teeth;

wherein the relative positioning of the coil structure and the magnetic structure ~~are positioned relative to each other such~~ is configured so that the row of magnetic poles is positioned opposing the row of teeth, around which coils are wound~~, the coil structure and the magnetic structure being separated by an air bearing~~.

6. (*Cancelled*).

7. (*Original*) The system of Claim 2, wherein said third and fourth linear actuators are electromagnetic linear actuators, comprising:

a magnetic structure having a row of alternating magnetic poles on an outer surface thereof, said row being orientated in said first direction; and

a coil structure having an iron core with a number of teeth in a row orientated in said first direction and having a number of coils wound around a respective number of said teeth;

wherein the coil structure and the magnetic structure are positioned relative to each other such that the row of magnetic poles is positioned opposing the row of teeth around which coils are wound, the coil structure and the magnetic structure being separated by an air bearing.

8. (*Original*) The system of Claim 7, wherein said air bearing for separating the coil structure and the magnetic structure is adapted to support said first and second linear actuators.

9. (*Original*) The system of Claim 1, wherein said object carrier is positioned relative to said first and second linear actuators such that a vertical line through a center of gravity of said object carrier is located between said first and second linear actuators.

10. (*Original*) The system of Claim 2, wherein said first and second linear actuators are positioned relative to said third and fourth linear actuators such that a common center of gravity of said first and second linear actuators is positioned between said third and fourth linear actuators.

11. (*Original*) The system of Claim 1, wherein said first and second linear actuators are substantially symmetrically positioned with respect to the center of gravity of said object carrier.

12. (*Original*) The system of Claim 2, wherein said third and fourth linear actuators are substantially symmetrically positioned with respect to the common center of gravity of the first and second linear actuators.

13. (*Original*) The system of Claim 1, wherein said first and second linear actuators are positioned at opposite ends of the object carrier.

14. (*Original*) The system of Claim 2, wherein said third and fourth linear actuators are positioned at opposite ends of said first and second linear actuators.

15. (*Original*) The system of Claim 1, wherein said second direction is perpendicular to said first direction.

16. (*Original*) The system of Claim 1, further comprising a control system configured to control said first and second linear actuators.

17. (*Withdrawn*) A lithographic apparatus, comprising:

an illumination system configured to provide a beam of radiation;

a carrier structure configured to carry a patterning device, the patterning device serving to impart the beam of radiation with a pattern in its cross-section;

a first and second linear actuator configured to move said carrier structure in a first direction, said first and second linear actuators extending in parallel along said first direction, wherein said first and second linear actuators are adapted to support said carrier structure;

a third and a fourth linear actuator configured to move said carrier structure in a second direction, said third and fourth linear actuators extending in parallel along said second direction;

a substrate holder configured to hold a substrate; and

a projection system configured to project the patterned beam onto a target portion of the substrate.

18. (*Withdrawn*) A lithographic apparatus, comprising:

an illumination system configured to provide a beam of radiation;

a support structure configured to support a patterning device, the patterning device serving to impart the beam of radiation with a pattern in its cross-section;

a carrier structure configured to carry a substrate;

a first and second linear actuator configured to move said carrier structure in a first direction, said first and second linear actuators extending in parallel along said first direction, wherein said first and second linear actuators are adapted to support said carrier structure;

a third and a fourth linear actuator configured to move said carrier structure in a second direction, said third and fourth linear actuators extending in parallel along said second direction; and

a projection system configured to project the patterned beam onto a target portion of the substrate.

19. (*Currently Amended*) A method for carrying and moving an object in a plane, comprising:

positioning said object on an object carrier, said object carrier being moveable by a first and a second linear actuator in a first direction and by a third and a fourth linear actuator in a second direction, said first and second linear actuators being adapted to support said object carrier by having a coil structure and a magnetic structure that are separated by an air bearing that is adapted to support said object carrier; and

controlling said first and second linear actuators to move said object carrier in said first direction.

20. (*Original*) The method of Claim 19, further comprising controlling said third and fourth linear actuators to move said object carrier in said second direction.

21. (*Original*) The method according to claim 20, wherein said controlling said first and second linear actuators to move said object carrier in the first direction comprises:

inputting a set position in a control system;

determining an actual position of said object carrier;

inputting the actual position in said control system;

determining a control signal suitable to move said object carrier from said actual position to said set position; and

feeding said control signal to said linear actuators.

22. (*Original*) The method of Claim 21, wherein said determining actual position of said object carrier comprises:

determining an actual position of each linear actuator, and

determining from said actual position of each linear actuator whether both linear actuators move synchronously.

23. (*Original*) The method of Claim 21, wherein said determining control signal

comprises determining a control signal for each linear actuator suitable to compensate any positional and rotational error resulting from asynchronous movement of said linear actuators.

24. (*Withdrawn*) A device manufacturing method, comprising:

providing a substrate;

providing a beam of radiation using an illumination system;

imparting the beam of radiation with a desired pattern in its cross-section based on a patterning device, said patterning device being carried by a carrier structure;

moving said patterning device into a desired position along a first and second direction, wherein said carrier structure is moveable by a first and a second linear actuator in the first direction and by a third and a fourth linear actuator in the second direction, said first and second linear actuators being adapted to support said carrier structure;

controlling at least said first and second linear actuators and said third and fourth linear actuators to respectively move said carrier structure in said first and second directions; and

projecting the patterned beam of radiation onto a target portion of the substrate.

25. (*Withdrawn*) A device manufacturing method, comprising:

providing a substrate, said substrate being carried by a carrier structure;

providing a beam of radiation using an illumination system;

imparting the beam of radiation with a desired pattern in its cross-section based on a patterning device;

moving said substrate into a desired position along a first and second direction, wherein said carrier structure is moveable by a first and a second linear actuator in the first direction and by a third and a fourth linear actuator in the second direction, said first and second linear actuators being adapted to support said carrier structure;

controlling at least said first and second linear actuators and said third and fourth linear actuators to respectively move said carrier structure in said first and second directions; and

projecting the patterned beam of radiation onto a target portion of the substrate.